

BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In The Matter of )  
 )  
Allocations of Spectrum Below ) ET Docket No. 94-32  
5 GHz Transferred From )  
Federal Government Use )

To: The Commission

REPLY COMMENTS  
OF THE  
AMERICAN PETROLEUM INSTITUTE

The American Petroleum Institute ("API"), by its attorneys and pursuant to Section 1.415 of the Rules and Regulations of the Federal Communications Commission ("Commission" or "FCC"), hereby respectfully submits these Reply Comments in response to the Comments filed in the instant proceeding on December 19, 1994 that addressed issues raised in the Commission's Notice of Proposed Rule Making ("Notice").<sup>1/</sup>

**I. PRELIMINARY STATEMENT**

1. API's interests and concerns with the proposal offered in the Notice were discussed in detail in its Comments of December 19, 1994. Accordingly, API will not burden this record with a reiteration of its substantial interest in this proceeding.

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<sup>1/</sup> 59 Fed. Reg. 59393 (November 17, 1994). The date set for filing these Reply Comments was extended from January 3 to January 6, 1995 by the Chief, Office of Engineering and Technology (released December 28, 1994).

29

2. As explained in greater detail in API's Comments, it supports:

(a) Paired use of the bands 2390-2400/2300-2310 MHz, with accelerated allocation of the band 2300-2310 MHz, for shared point-to-multipoint voice, Supervisory Control and Data Acquisition ("SCADA"), and wireless local loop services;

(b) Retention of the band 2402-2417 MHz for Part 15 use;

(c) Channelization of the band 4660-4685 MHz for low density, long haul microwave use;

(d) Assignment of a portion of this spectrum for private system use without auctions;

(e) Further Commission effort to identify spectrum to meet the needs described in the Petition of the Coalition of Private Users of Emerging Multimedia Technologies ("COPE"); and

(f) Any Commission action that addresses the need for an Emergency Response Allocation for the private sector.

## II. REPLY COMMENTS

### A. **Broad Support Exists for the Proposition That the FCC Should Allocate the Band 2300-2310 MHz for Paired Use With the Band 2390-2400 MHz**

3. A wide variety of commentators expressed a deep interest in the Commission's suggestion that it may allocate the band 2300-2310 MHz for paired use with the band 2390-2400 MHz. Generally, the majority of participants that addressed the issue cited their support for a pairing arrangement.<sup>2/</sup> API supports shared use of these bands provided that such an arrangement will accommodate private services requirements.<sup>3/</sup> In the alternative, should the FCC fail to support this "pairing" position, API endorses allocating the band 2390-2400 MHz solely for private communications systems in a manner recommended by other participants.<sup>4/</sup>

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<sup>2/</sup> For example, see Comments of Telecommunications Industry Association (Mobile and Personal Communication Division and Fixed Point-to-Point Microwave Section) ("TIA") at 2; Wireless Cable Association International, Incorporated at 4; Motorola, Inc. ("Motorola") at 2, 6-10; United States Telephone Association ("USTA") at 1-4; Organization for Protection and Advancement of Small Telephone Companies ("OPASTCO") at 2; Western States VHF-Microwave Society at 2; SR Telecom Inc. at 3-6; TDS Telecommunications Corporation at 1; Southwestern Bell Telephone Company at 7-8; Rochester Telephone Company at 1; NYNEX Telephone Company at 2; and U.S. West Communication at 1-5.

<sup>3/</sup> See API Comments at 5.

<sup>4/</sup> See Comments of Utilities Telecommunications Council ("UTC") at 12; Personal Communications Industry Association ("PCIA") at 18.

**B. The Band 2402-2417 MHz Should Continue to Be Dedicated for Part 15 Devices**

4. API reiterates its opposition to any attempt to clear the band 2402-2417 MHz of Part 15 operations. Substantial advancements in Part 15 technologies, especially in the area of spread spectrum technologies, have been made largely due to the FCC's encouragement in developing the technology. Use of this technology has become quite successful and thus attracted heavy investment by a wide array of manufacturers and users. Any ill-conceived reallocation of the band 2402-2417 MHz would disrupt the operations of many existing users who have relied on the Commission's encouragement to utilize equipment that operates in the band 2400-2483.5 MHz. Accordingly, API joins the overwhelming number of commentators who argue that use of this band for unlicensed equipment should not be disrupted.<sup>5/</sup>

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<sup>5/</sup> See generally Comments of Institute of Electrical and Electronics Engineers ("IEEE") at 3; Electronics Industry Association's Consumer Electronics Group ("EIA/CEG") at 11; Microsoft Corp. at 5; 3Com Corporation at 1-2; UTC at 13; Southern California Repeater and Remote Base Association ("SCRRBA") at 6; Sun Microsystems, Inc. at 3; TIA at 11; Cincinnati Microwave at 2; Part 15 Coalition at 1-2, 5-8; Cylink Corporation at 3; Andrew Corporation at 3-6; Fusion Systems Corporation at 4; Motorola at 1, 10-14; Tetherless Access, Ltd. at 1-3; Windata, Inc. at 2; Compaq Computer Corporation at 2-5; Norand Corporation at 8; American Telephone and Telegraph ("AT&T") at 2, 5; Metricom, Inc. at 4, 13; Advanced Micro Devices, Inc. at 1; Apple Computer at 1-2; Symbol Technologies, Inc. at 1, 7; International Business Machines ("IBM") at 14; Western Multiplex Corporation at 5; and Laurel/Qualcomm Partnership L.P. at 4.

**C. Low Density, Long Haul Microwave Requirements Can Be Met by Allocating the Band 4660-4685 MHz for Licensees Displaced From the 2 GHz Band**

5. Regarding the band 4660-4685 MHz, the FCC unfortunately indicated a preliminary disposition toward allocating the spectrum for broadcast auxiliary services.<sup>6/</sup> API adamantly disagrees with the premature conclusion that the issue of further spectrum allocation for fixed microwave operations has been adequately addressed.<sup>7/</sup> Satisfactory arrangements have yet to be made for low density, long haul microwave requirements. In particular, since the bands 2130-2150/2180-2200 MHz have been reallocated for emerging technologies, the band 4660-4685 MHz could be utilized as a replacement for displaced low density, long haul microwave users.<sup>8/</sup> More realistic relief could be made available by expediting allocation of contiguous spectrum as recommended by Alcatel Network Systems, Inc.<sup>9/</sup>

6. Concerning MST's assertion that, due to Broadcast Auxiliary Service ("ATV") overcrowding, the band must be

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<sup>6/</sup> Notice at Paragraph 21.

<sup>7/</sup> Notice at Paragraph 22.

<sup>8/</sup> API further notes that, due to the obvious need to accommodate displaced low density, long haul microwave operations, the Association for Maximum Service Television's ("MST") assertion that no pressing need for microwave fixed links has been demonstrated is without basis. (See MST Comments at 5.)

<sup>9/</sup> See Comments of Alcatel Network Systems at 9.

allocated to ATV, the following issues need to be considered: (1) providers of essential energy services have a more drastic need for spectrum; (2) the "scientific" foundation of MST's assertion is a document which fails to compare private service's needs with those of broadcast services,<sup>10/</sup> and (3) the 25 MHz band contains enough spectrum to accommodate some low density, long haul microwave requirements, as well as some ATV use.

**D. The Proposed Plan for Auctioning and Allocating the Subject 50 MHz of Spectrum Is Flawed**

7. A significant number of commentators noted that all or a portion of the proposed auction and allocation plan presented in the Notice is deeply flawed.<sup>11/</sup> Of particular concern was the fact that Congress did not intend to extend competitive bidding beyond the commercial arena to private

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<sup>10/</sup> Also, the document in question, "A Preliminary Look at Spectrum Requirement for Fixed Services," by R. Matheson & K. Steele, is not an official NTIA document, as MST's Comments may lead the reader to believe. See API's Comments at 8-11 for a further exploration of this subject.

<sup>11/</sup> See Comments of IEEE at 3; Microsoft at 7; TIA at 3-6; UTC at 10-11; Part 15 Users Group at 8-9; Cylink Corporation at 4-5; Los Angeles County at 13; Norand Corporation at 11-14; Compaq Computer Corp. at 12-16; Leaco Rural Telephone Cooperative, Inc. ("Leaco") at 4-5; Motorola at 1-2, 15-17; Industrial Telecommunications Association ("ITA") at 4-11; Association of Public-Safety Communications Officials-International, Inc. ("APCO") at 2-6; Forest Industries Telecommunications ("FIT") at 3; Los Angeles County Sheriff's Department at 6; and Western Multiplex Corporation at 2.

radio,<sup>12/</sup> and that the auctions would subsume the FCC's

independent obligation to assure that spectrum allocations advance the public interest.<sup>13/</sup>

8. The Commission is reminded that it has not been directed by Congress to assign all available spectrum through competitive bidding. Moreover, only commercial services, and not private services, should be subject to competitive bidding.<sup>14/</sup>

9. The concern of private system users can be addressed by a variety of alternative approaches. This includes withholding some spectrum from the auction process and assigning it on a shared, frequency-coordinated basis in a manner followed in the private services for nearly fifty years. Other options suggested by participants in this proceeding included leasing unused spectrum<sup>15/</sup> and

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<sup>12/</sup> See Comments of UTC at 10-11.

<sup>13/</sup> See Comments of Motorola at 15-17.

<sup>14/</sup> The Omnibus Budget Reconciliation Act of 1993 states that competitive bidding may apply if the FCC determines that "the principal use of such spectrum will involve, or [be] reasonably likely to involve, the licensee receiving compensation from subscribers . . . ." Section 309(j)(2).

<sup>15/</sup> See Comments of U.S. West Communications, Inc. at 6, and Leaco at 11.

partitioning Basic Trading Areas<sup>16/</sup> that could facilitate fuller use of the spectrum than might otherwise be possible.

**E. The Spectrum Needs Raised in the Petition of the Coalition of Private Users of Emerging Multimedia Technologies ("COPE") Need to be Considered in the Instant Proceeding**

10. The specialized needs of private users, despite the Notice's tentative conclusion to the contrary, cannot be met in many instances by commercial carriers responding to the needs of the marketplace.<sup>17/</sup> Those private user needs must be addressed.<sup>18/</sup> A partial satisfaction of the spectrum requirements raised in the COPE Petition could be addressed in the instant proceeding through specific allocations in the bands 2300-2310 MHz and 2390-2400 MHz.

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<sup>16/</sup> See Comments of Southwestern Bell Telephone Co. at 11; Bell Atlantic at 7; Rochester Telephone at 2; and Leaco at 11.

<sup>17/</sup> See Comments of PCIA at iii regarding the unstable nature of public networks. ["Public Networks may begin operation, may expand, may increase their sophistication level, may go bankrupt, may increase or decrease their area of coverage, may cut rates or raise rates. Regardless of the direction public systems may take, the ability to build and operate a private radio system must be preserved. The well-engineered private network has, and will continue to have, certain attributes that are not just desirable, but essential."]

<sup>18/</sup> See Comments of American Association of Railroads ("AAR") at 1; APCO at 7-10; ITA at 11-12; FIT at 4; Motorola at 1-6; PCIA at 19; and UTC at 6.



**F. The FCC Must Acknowledge the Critical Need for an Emergency Response Allocation**

11. API remains concerned over the Commission's unfortunate lack of response to repeated attempts to have the FCC acknowledge and address the need for an Emergency Response Association ("ERA").<sup>19/</sup> The ramifications of failing to address this issue could be most severe in the event of an oil spill even a fraction of the size of the Alaskan misfortune. At a minimum, the ERA needed to realistically respond to emergency situations must support systems with the following parameters: 20 paired channels, trunked, mobile, with approximately 25 watt repeaters.

**III. CONCLUSION**

12. There is substantial support for the allocation of the band 2300-2310 MHz for paired use with the band 2390-2400 MHz. API supports such a pairing arrangement if the allocation is shared between private and common carrier services. Concerning the band 2402-2417 MHz, a vast majority of commentators joined API in agreeing that no attempt should be made to clear the band of Part 15 operations. Regarding the band 4660-4685 MHz, low density, long haul microwave requirements can be met by an allocation of this band along with the dedication of adjacent spectrum.

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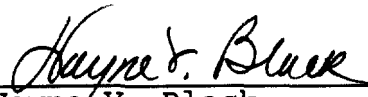
<sup>19/</sup> API's Comments and Reply Comments filed in the Inquiry phase of this proceeding amply document those concerns.

13. The issues raised in the COPE Petition were unwisely dismissed in the Notice and must be considered in the instant proceeding. Proposed plans for auctioning and allocating the entire 50 MHz of spectrum are deeply flawed, in violation of Congressional directives, and do not adequately serve the public interest concerns raised by non-commercial entities. Finally, the FCC is reminded once again to acknowledge and positively address the critical need for an Emergency Response Allocation.

**WHEREFORE, THE PREMISES CONSIDERED,** the American Petroleum Institute respectfully submits the foregoing Reply Comments and requests the Federal Communications Commission take action in a manner consistent with the views expressed herein.

Respectfully submitted,

**AMERICAN PETROLEUM INSTITUTE**

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